



Attorney Docket: 200106.00003

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Jack Nilsson

Examiner: Unknown

Serial No.: 10/787,031

Art Unit: 2821

Filed: February 25, 2004

Date: June 16, 2004

For: APPARATUS AND METHOD FOR A MULTI-POLARIZED ANTENNA

**TRANSMITTAL**

**Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

Transmitted herewith:

- 1) Information Disclosure Statement
- 2) PTO-1449 Form
- 3) Acknowledgement of Receipt/Return Card

HAHN LOESER + PARKS LLP

By   
David J. Muzilla  
Reg. No. 50,914

**CERTIFICATE OF MAILING**

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United State Postal Service as on the date shown below and addressed to the: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

6-16-2004  
Date

  
David J. Muzilla



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Jack Nilsson

Examiner: Unknown

Serial No: 10/787,031

Art Unit: 2821

For: APPARATUS AND METHOD FOR A MULTI-POLARIZED ANTENNA

Filed: February 25, 2004

Date: June 16, 2004

INFORMATION DISCLOSURE STATEMENT

Under 37 CFR 1.97

This Information Disclosure Statement is filed within three months after the filing date of this application or before the mailing of an Office Action on the merits, whichever event occurs last, and therefore is considered timely under 37 CFR §1.97(b).

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made (37 CFR §1.56(g)), an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

The filing of this Information Disclosure Statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13, at 25.

This Information Disclosure Statement is made to comply with the duty of candor imposed on all individuals associated with the filing or prosecution of this application, as defined by 37 CFR §1.56(c).

Six (6) U.S. references are listed on the attached one (1) sheet of Form PTO/SB/08A which is made a part of hereof. Copies of these cited references are not enclosed. Six (6) non-patent references are listed on the attached one (1) sheet of Form PTO/SB/08B which is made a part hereof. Copies of cited references are enclosed.

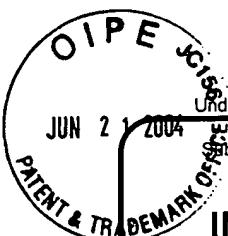
The foregoing Information Disclosure Statement is based upon the information known to the inventor or contained in the undersigned attorney's file as of the filing date of this statement and is inclusive of the best information known to each of the undersigned at that date. Prompt consideration of the Information Disclosure Statement and the references by the Examiner is earnestly requested.

Respectfully submitted,



David J. Muzilla  
Reg. No. 50,914

Hahn Loeser & Parks LLP  
1225 West Market Street  
Akron, Ohio 44313  
330/864-5550  
Atty. Docket: 200106.00003



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Approved for use through 07/31/2008. GMB 0851-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(Use as many sheets as necessary)*

Sheet

1

10

**Complete if Known**

Application Number	10/787,031
Filing Date	02/25/2004
First Named Inventor	Jack Nilsson
Art Unit	2821
Examiner Name	Unknown
Attorney Docket Number	200106.00003

Sh

1

10

A1

Number 200106.00003

## U. S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

JUN 21 2004

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

1

of

1

## Complete if Known

Application Number	10/787,031
Filing Date	02/25/2004
First Named Inventor	Jack Nilsson
Art Unit	2821
Examiner Name	Unknown

Attorney Docket Number 200106.00003

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	HTTP://WWW.MAGNETICSCIENCES.COM/UWBANDVPOLANTS~NS4.HTML, "Ultra-Wideband (UWB) and Multiband antenna for RF, microwaves and UWB,"	
	CB	HTTP://WWW.MAGNETICSCIENCES.COM/MULTIBEAMSATCOMANTENNA~NS4.HTML, "Multiple Beam Antenna for Satellite Communications and LOS Communications,"	
	CC	HTTP://WWW.NORTHCOUNTRYRADIO.COM/ARTICLES/DISCFIG2.HTM, "Discone Figures,"	
	CD	HTTP://KYLETI.ASWWC.NET/INDEX.PHP?PAGE=PROJECTS&OLD_PROJECT+80211B_DISCONE, "Tim and David's 2.4 GHz802.11b Discone,"	
	CE	HTTP://WWW.WAVE-REPORT.COM/TUTORIALS/OFDM.HTM, "OFDM Tutorial,"	
	CF	BROADBAND WIRELESS INTERNET FORUM WHITE PAPER, "VOFDM Broadband Wireless Transmission and Its Advantages over Single Carrier Modulation; Document Number WP-1_TG-1," Boradband WIreless Internet Forum, 1.2 ed., Broadband WIreless Internet Forum, p. 1-35, (December 15, 2000).	

Examiner Signature		Date Considered
--------------------	--	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.